

CLAIMS

1. A process for manufacturing a wiring board,
said process comprising the following steps of:

5 making a resin plate having wiring pattern
recesses and via through holes;

coating all of the surfaces of the resin
plate including inner walls of said wiring pattern
recesses and via through holes with a metal film;

10 applying an electro-plating using said
metal film as a power-supply layer to fill a plated metal
into said wiring pattern recesses and via through holes;
and

15 removing said metal film formed on said
resin plate except for the inner walls of said wiring
pattern recesses and via through holes, so that wiring
pattern and vias are exposed on a surface the same as
that of said resin plate.

2. A process as set forth in claim 1, wherein said
resin plate is formed by press-forming process.

20 3. A process as set forth in claim 1, wherein said
resin plate is formed by an injection molding process.

4. A process as set forth in claim 1 further
comprising the following steps of:

25 forming pads on one surface of the wiring
board to which external connecting terminals are to be
attached.

5. A process as set forth in claim 1 further
comprising the following steps of:

30 using said wiring board as a core
substrate; and

forming wiring patterns on the respective
surface of the core substrate by means of resin layers to
obtain a multi-layer wiring board.

35 6. A process for manufacturing a multi-layer
wiring board, said process comprising:

(a) manufacturing a core substrate comprising
the steps of:

making a resin plate having wiring pattern recesses and via through holes;

coating all of the surfaces of the resin plate including inner walls of said wiring pattern

5 recesses and via through holes with a metal film;

applying an electro-plating using said metal film as a power-supply layer to fill a plated metal into said wiring pattern recesses and via through holes; and

10 removing said metal film formed on said resin plate except for the inner walls of said wiring pattern recesses and via through holes, so that wiring pattern and vias are exposed on a surface the same as that of said resin plate; and

15 (b) forming resin layers on respective surfaces of said core substrate so that said resin layers includes wiring pattern recesses and via through holes;

(c) coating all of surfaces of said resin layers including inner walls of said wiring pattern
20 recesses and via through holes with a metal film;

(d) applying an electro-plating using said metal film as a power-supply layer to fill a plated metal into said wiring pattern recesses and via through holes; and

25 (e) removing said metal film attached to said resin layer except for the inner walls of said wiring pattern recesses and via through holes, so that wiring pattern and vias are exposed on a surface same as that of said resin plate.

30 7. A process as set forth in claim 6, wherein said resin layer is formed by a press-forming process.

8. A process as set forth in claim 6, wherein said resin plate is formed by a injection molding process.